



FINAL REPORT
for the second implementation phase
Increased Use of Renewable Energy Resources Program

FENERCA



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Prepared by:

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FENERCA

Increased Use of Renewable Energy Resources Program

EXECUTIVE SUMMARY

E+Co, in close partnership with BUN-CA (Biomass Users Network-Central America), has been implementing the USAID-supported program to increase the use of renewable energy in five countries in Central America: El Salvador, Guatemala, Honduras, Nicaragua and Panama. Due to the cultural and language characteristics of the region, the program has been entitled FENERCA -Financiamiento de Empresas Energéticas en Centroamérica.

The FENERCA program was launched in April 2000 with US \$ 1.1 million for eighteen months. FENERCA is currently concluding its second phase of implementation (US \$ 1.7 million, October 2001-March 2003).

The present document is the “Final Report” (or sixth quarterly report) of FENERCA's second phase and is not a cumulative assessment of FENERCA's achievements. It focuses only on the second phase of the program, for the eighteen-month period of October 2001 – March 2003, presenting a detailed account of the results and activities undertaken during this time.

Given the success of the FENERCA program, it was extended for an additional 24 months: US \$ 5.0 million through April 2005. FENERCA's third phase will run from April 2003 through March 2004 (US \$ 1.4 million) and FENERCA's fourth phase will run from April 2004 through March 2005 (US \$ 3.6 million)¹.

The recommendations presented in the present report are oriented towards the implementation of the third phase of the program that started in April 2003.

E+Co, in partnership with BUN-CA, has achieved significant results. Deliverables have been completed as anticipated and within the overall budget.

Highlights

- 15 business plans completed in Central America;
- 7 additional business plans with Productive Uses applications completed in Brazil, Zambia and Tanzania;
- Enterprise Development Services provided to 28 enterprises in Central America;
- US\$ 28.4 million committed and/or invested by local Financial Institutions (17.2 MW);
- ~ 1 MW of renewable energy delivered to the local grid in Honduras by two FENERCA supported enterprises;
- Additional 15.6 MW of renewable energy will start construction soon in Guatemala and Honduras;
- ~1,400 Solar Home Systems (SHS) being installed in rural communities in Nicaragua;

¹ On September 2002 USAID estimated an additional budget of US \$ 3.6 million for FENERCA's fourth phase (April 2004 – March 2005). However, recent conversations with USAID officials have suggested that there would be a significant reduction of this budget; due to an overall reduction in USAID's EGAT/EIT division budget.

- 1 project currently under expansion (4 MW) in Guatemala;
- 34 Financial institutions trained on “Financing Hydroelectric Projects” in El Salvador, Guatemala, Honduras Nicaragua and Panama;
- Assistance to the Energy Commission of the Honduran Congress in drafting legislation on “Incentives for renewable energy projects”;
- Market Opening events realized in Brazil and South Africa to initiate the replication of the FENERCA program in other regions;
- Improvement and dissemination of training materials and manuals (Toolkit, off-grid Manual, Carbon Manual, M&E Manual, Financing Hydroelectric Projects);
- US \$ 313,000 leveraged from UNEP/E+Co BREED (Brazil Rural Energy Enterprise Development), UNDP-GEF/BUN-CA FOCER (Fortalecimiento de la Capacidad en Energía Renovable para Centro América) programs, and E+Co/Greenpeace contract;
- Additional US \$ 25,000 leveraged from Citigroup for a Financial and Business Training for Mid-Size Renewable Energy Project developers to be held in Honduras in May 2003 with participation from Citigroup officers.

FENERCA was able to advance the following work under each of the originally anticipated tasks:

Main Results

Task CA 3: Enterprise Development Services and Completion of Business Plans

- FENERCA's pipeline consisted of 49 business opportunities at different stages of development (including 21 ongoing projects from FENERCA's first phase and 28 new enterprise opportunities). These projects were analyzed and then trimmed down to 20 enterprises to receive enterprise development services.
- Although 20 projects were pre-selected, ongoing requests from local entrepreneurs resulted in a total of 32 enterprises receiving enterprise development services, including financial structuring, market assessment and business planning.
- 15 business plans completed.
- 3 FENERCA supported projects: Snow Mountain, a run of the river hydro project producing 480 kW of new and clean energy to the local grid in Honduras. La Esperanza a hydro project that is currently producing 485 kW of its phase 1A in Honduras and Tecnosol, a PV company that will be installing ~1,400 solar home systems (SHS) in rural communities in Nicaragua –the systems will be sold on a cash and credit basis.
- 4.1 MW of additional renewable energy reached financial closure and will start construction soon in Honduras and Guatemala. La Esperanza, a FENERCA project already producing electricity in Honduras, reached financial closure for its second phase and will initiate construction in the near term bringing 11.2 MW of additional electricity.
- Papeles Elaborados, a hydro project in Guatemala, is expanding to 12 MW from current 8 MW capacity.

Task CA 4: Strengthening of Financial Institution Capacity

- Five training sessions on “Financing Hydroelectric Projects” were held in each of the five targeted countries (Guatemala, El Salvador, Honduras, Nicaragua and

Panama.

- 52 financiers from 34 different local financial institutions were trained.
- Targeted training materials, including a Manual on Financing Hydroelectric projects, were developed, translated and distributed.
- Increased interest from local financial institutions in finance renewable energy projects has been achieved. US \$ 13 million have been committed by local financial institutions.

Task CA 5: Capacity Building for Entrepreneurs and NGOs

- 13 “one-on-one” training sessions were held for entrepreneurs on business plan preparation and financial analysis. From the 13 entrepreneurs trained by FENERCA, 7 completed business plans, 1 improved its business plan and 1 will be completing its business plan soon.
- 25 entrepreneurs and project developers were trained. The training and tools provided through these training sessions enabled local entrepreneurs to structure concrete project deals, with E+Co and BUN-CA’s support, and undertake the necessary financial analysis to prepare their projects for investment.

Task CA 6: Organizing Next Stage Financing

- US\$ 400,000 of financing disbursed by E+Co to 3 specific renewable energy projects in Central America and Africa, out of E+Co’s original commitment of US \$ 305,000. These investments were a direct result of FENERCA’S training efforts and enterprise development services within tasks CA 3 and CA 4, which translated into stronger entrepreneurial capacity and sound projects.
- US \$ 28.4 million committed and/or invested by local financial institutions to finance 17.2 MW of new and clean energy projects
- Continued discussions and conversations with potential investors and financial organizations (e.g. Shell Foundation, CABEL – Central American Bank of Economic Integration) that could be interested in capital formation for the clean energy sector and the creation of a fund for the Central American region.

Task CA7: Developing Regulatory and Policy Options for Renewable Energy projects

- To achieve better support from local governments on the implementation of renewable energy projects, the FENERCA team organized the first National Renewable Energy Workshop for municipalities in Honduras.
- As part of the actions that have been initiated in each targeted country by governmental bodies to facilitate the implementation of renewable energy projects, the FENERCA team assisted the Energy Commission of the Honduras Congress in drafting legislation on “Incentives for Renewable Energy projects”. Such legislation is currently in Congress under study.
- 5 draft proposals for legislation to facilitate the implementation of renewable energy projects have been presented to the National Congress in Guatemala, Honduras and Panama.

Task A1: Productive Uses and Market Opening

- South Africa and Brazil selected as new markets to replicate the FENERCA concept
- 14 enterprises with productive uses applications supported in Africa and Brazil from which 7 concluded a business plan.

- US \$ 35,000 invested by E+Co in two clean energy enterprises with productive use applications in Zambia and Tanzania.

Task MME: Project Management, Monitoring and Evaluation

- Periodic conference calls and monthly meetings held among FENERCA team members.
- Quarterly reports prepared and submitted on time by Task Managers. The information collected through these reports has provided the FENERCA management team with key information on the program's performance and has been utilized to implement course correction and improvement measures and to fulfill USAID's reporting requirements.
- Participation on February 28, 2003 on the Rural Team Partners Meeting organized by USAID EGAT/EIT in Washington.

Conclusion and Lessons Learned

The FENERCA team has been able to accomplish and in most cases exceed the program's originally anticipated results on both timing and budget. As a result of the work achieved, the FENERCA team has identified numerous new opportunities and has built a strong network with local enterprises, financial institutions and regulatory bodies. Since its commencement in April 2000, FENERCA has developed a "brand" recognition in Central America, meaning that the services of FENERCA are well known in the region and entrepreneurs and other stakeholders (including financial institutions) often approach the FENERCA team without the need for targeted outreach. These activities will require further handholding to ensure adequate institutional strengthening and deal structuring to guarantee a satisfactory use of renewable energy resources in El Salvador, Guatemala, Honduras, Nicaragua and Panama.

Lessons learned after implementing the FENERCA program for 36 months will allow the team to continue exceeding expectations during the next 24 months (April 2003 – March 2005). It is suggested that the FENERCA team follow these recommendations based on its lessons learned:

- There are more renewable energy opportunities than FENERCA can serve. In addition to the success of the program to date, one of the reasons for the extension was to allow more entrepreneurs to benefit from FENERCA's services. The program should continue focusing in Central America where a pipeline of projects has been already created, but also extend to other markets where already some actions were initiated in South America and Africa.
- Post investment EDS is required. Experience has shown that on-going market reforms and ever changing rules many times result in different than anticipated project development, creating a need of further updates, refined financial engineering and in some cases, technical assistance funds to properly assess feasibility and to make projects stronger to secure second stage financing. The FENERCA team needs to concentrate on "post investment EDS" – Enterprise Development Services to entrepreneurs after an investment has been made in order to guarantee its sustainability and chances of getting additional funding for further phases of the

projects.

- Lack of Investment. Experience has shown that there are not enough funds to invest in the initial phases of renewable energy projects in the Central American region. This is given to a lack of innovative financing mechanisms for renewable energy projects. Most traditional financial institutions are not willing to invest seed capital in renewable energy projects due to its high risk and longer term of cost recovery, which makes it harder for them to succeed and reach financial closure. To cope with the lack of investment it is proposed that the FENERCA team continue concentrating its efforts in the creation of a renewable energy fund for the Central American Region.
- Regulatory markets in constant change. The countries supported by FENERCA are democracies with presidential and congressional elections every three to four years, which produces constant change in policy reforms and therefore making difficult a sequence of actions initiated towards the facilitation of the implementation of renewable energy projects in the region. However, constant work with governmental bodies has shown that short-term actions are likely to be adopted and implemented. The FENERCA team should continue focusing on the policy arena, specifically in those actions that could be accomplished on the short term. It is also important to focus FENERCA's efforts in those countries where government elections are not going to happen in the short term.
- In-country partners are key. The presence of in-country partners and its network of contacts is key for the successful implementation of the program. The FENERCA team has been able to achieve significant results in terms of identifying renewable energy entrepreneurs and developing FENERCA's pipeline with the support of E+Co's partner BUN-CA in Central America. The same applies to the work advanced under the task CA 7 – Developing regulatory and policy options for renewable energy projects. BUN-CA has contributed significantly to the identification of barriers that are making difficult the implementation of renewable energy projects and working hand in hand with energy officials in the region to initiate processes for the removal of such barriers. To guarantee FENERCA's success in its next phases, it is suggested that FENERCA continues working with its partner organization BUN-CA in the implementation of the program in Central America, as well as with other local organizations on the new markets where the FENERCA program will be replicated.

Respectfully submitted,

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INTRODUCTION

E+Co is implementing the FENERCA program -Financiamiento de Empresas Energéticas en Centroamérica-, in close partnership with BUN-CA (Biomass Users Network-Central America). The program aims to assist five countries in the region (Guatemala, El Salvador, Honduras, Nicaragua and Panama) set a course that integrates environmental and economic sustainability into their energy development agenda.

FENERCA started as a US\$ 1.1 million/18 month initiative in April 2000. At the end of the program (October 2001) all objectives and milestones had been achieved and in many instances exceeded. As a result of the success, additional funding of US\$1.7 million was approved by USAID and an extension for eighteen months (October 2001-April 2003) made possible the second phase of the FENERCA program which is the focus of the present report.

The present report is FENERCA's Final Report of its second implementation phase – or sixth quarterly report. The report has been developed to meet the obligations described in Attachment 1, Paragraph E, numeral 3, "Final Reporting", of USAID's Leader with Associates Cooperative Award, Number LAG-A-00-00-00008-00 on the Increased Use of Renewable Energy Resources Program. This report presents the information in accordance with 22CFR 226.51 9 (d) and complies with the submission criteria contained in ADS 540.5.2d-g, as requested in FENERCA's contract. It describes all FENERCA activities undertaken from the period of October 2001 to April 2003.

The information has been organized by task/activities and includes both quantitative and qualitative data describing the specific work undertaken under each of the tasks envisioned for FENERCA's second phase. In addition, this report includes a financial performance report.

This report is not a cumulative assessment of FENERCA's achievements since its inception (April 2000); it focuses only on the second phase of the project that started on October 2001.

PROGRAM TASKS/ACTIVITIES

Task CA 3: Enterprise Development Services and Completion of Business Plans

Expected Results throughout the program (Oct 2001 – April 2003)	Results Achieved at April 2003
At least 20 projects supported with Enterprise Development Services - EDS (5 new; 15 current)	Total of 28 enterprises supported (13 new , and 15 current) specifically with EDS and Business Plan Structuring services: El Salvador: 3 Guatemala: 7 Honduras: 7 Nicaragua: 6 Panama: 5
13-15 Business Plans developed	- Total of 15 Business Plans Completed: El Salvador: 2 Guatemala: 3 Honduras: 2 Nicaragua: 3 Panama: 5 - Total of 3 Business Plans improved
Minimum 2 enterprises in each country	At least three enterprises receiving support in each country
Every effort to represent at least 4 Renewable Energy technologies	Current pipeline includes 5 Renewable Energy technologies (Hydro, PV, biomass, geothermal and wind)

Enterprise Development Services – EDS:

The FENERCA team created a pipeline of 49 enterprises that needed financial and business structuring support from Task CA 3 (Enterprise development services and business plan preparation) and Task CA 6 (Organizing next stage financing). The pipeline included 21 ongoing projects of FENERCA's first phase (April 2000 – October 2001) and 28 new enterprise opportunities (at different stages of development). List included on *Annex 1*.

Given the time frame and budget restrictions linked to the program, the FENERCA team had to trim down the original list (49 enterprises), to 20 enterprises to be supported with enterprise development services, business plan preparation and financial structuring services. However, given the increased demand from entrepreneurs, the FENERCA team ended up supporting a total of 32 enterprises (19 ongoing projects and 13 new) from which 28 were supported specifically with Enterprise Development Services (EDS)². A brief description of the projects supported is included in *Annex 2*.

As mentioned before, complementing the support of task (CA3 – EDS and Completion of Business Plans) for those enterprises that were at a more mature stage, FENERCA

² Enterprise Development Services include assistance on concept validation, market assessment, financial structuring, business plan preparation, negotiations and implementation.

supported them with financial structuring services through task CA 6 – Organizing Next Stage Financing- seeking financing.

Technical Assistance:

In addition to the EDS provided, FENERCA has provided technical assistance through third parties to the enterprises that required specialized expertise such as market studies to evaluate and define the most appropriate business model for the enterprise. The technical assistance services benefit the entrepreneur in pursuing the most appropriate business model for their enterprise. A total of 6 enterprises received technical assistance services from third parties *Annex 3* includes the list of enterprises that received technical assistance.

Business Plan Preparation:

From the 32 enterprises supported, 28 enterprises received specifically Enterprise Development Services and business plan preparation from which 15 business plans were completed and 3 business plans were improved. These include:

Business Plans completed:

As of April 2002:

El Rodeo (Guatemala)

As of July 2002:

Bronzeoak (Nicaragua)

Cececapa (Honduras)

La Boquita (Honduras)

As of October:

Eco-Carbon (El Salvador)

La Castalia (Guatemala)

Aselbo – El Bote

Aprodelbo – La Camaleona (Nicaragua)

As of January 2003:

La Laguna (Guatemala)

EPPSA – Rio Cochea (Panama)

EPPSA – La Cuchilla, Bocalatún (Panama)

EPPSA – Macano, Concepción (Panama)

EPPSA – Ojo de Agua (Panama)

EPPSA – San Andres (Panama)

As of April 2003:

Sabes (El Salvador)



La Castalia – Hydroelectric project in Guatemala

Business Plans Improved:

Ancon (Panama)

Tecnosol (Nicaragua)

Tres Valles (Honduras)



Tres Valles, Biomass project in Honduras

Copies of the business plans completed as of April 2002, July 2002, October 2002 and January 2003

were submitted to USAID as part of FENERCA's second, third, forth (annual) and fifth

quarterly reports respectively. The business plans concluded as of April 2003 are included in the present report as part of *Annex 4*.

Major Achievements:

The FENERCA team has been able to accomplish significant and important results for the Central American region during its second implementation phase. Results in terms of strengthening the enterprises supported and building a strong pipeline of projects with higher chances of attracting financing and thereby reaching financial closure; as well as projects already delivering new and clean energy to the region. Some of the main achievements in terms of the provision of Enterprise Development Services and Business Plan Preparation are:

- Of the 32 enterprises supported through FENERCA:
 - 3 are currently in operation,
 - 1 is under construction (to expand their existing capacity),
 - 3 will start construction soon, after have achieved financial closure
 - 14 are currently attracting financing and moving to financial closure
 - 1 is in its pilot phase
 - 2 are still at an early stage of development
 - 9 other (business plan preparation, completing technical studies, re-designing business strategy, etc)

Following is a list of the projects and its current status:

Project	Country	Technology	Capacity	Status
Eco-Carbon	El Salvador	Biomass	100,000 bags/year	Attracting financing, restructuring marketing strategy
Tecnosolar	El Salvador	PV	300 SHS	Business plan restructuring
Sabes	El Salvador	Hydro	70 kW	Attracting financing – Regulatory approval pending
La Castalia	Guatemala	Hydro	2 MW	Attracting financing, pre-feasibility phase
El Rodeo	Guatemala	Wind	3 MW	Attracting financing
Jones	Guatemala	Hydro	3.5 MW	Financial closure, Construction to start soon
San Judas	Guatemala	Hydro	30 MW	Attracting financing – Regulatory approval pending
La Laguna	Guatemala	Geothermal	2 MW th	Restructuring business plan
Dintersa	Guatemala	PV	100 SHS	Business plan in preparation
Selmecca	Guatemala	Hydro	1 MW	In search of equity partners – PPA under negotiation
Papeles	Guatemala	Hydro	4 MW Expansion	Under construction for expansion
Tres Valles	Honduras	Biomass	17.2 MW	Attracting financing
La Esperanza	Honduras	Hydro	1.2 MW – Phase 1 11.5 MW –Phase 2	In operation phase 1A, under construction phase 1B and reaching financial closure for second phase
Snow Mountain	Honduras	Hydro	480 kW	In operation
Cenit	Honduras	Hydro	750 kW	Business plan in preparation
Cececapa	Honduras	Hydro	2.8 MW	Attracting financing
Project	Country	Technology	Capacity	Status

La Boquita	Honduras	Hydro	173 kW	Attracting financing – Regulatory approval pending
El Cisne	Honduras	Hydro	711 kW	Business plan in preparation
Solaris	Honduras	PV	100 SHS	Early stage
Hidro Yojoa	Honduras	Hydro	630 kW	Financial closure, construction to start soon
Bronzeoak	Nicaragua	Biomass	1.4 MW	Attracting Financing
Tecnosol	Nicaragua	PV	~ 1,400 SHS	In operation
Atder	Nicaragua	Hydro	Under analysis	Technical studies under preparation
Asolpic	Nicaragua	Hydro		Attracting financing, Restructuring marketing strategy
Aprodelbo	Nicaragua	Hydro	425 kW	Attracting financing, Restructuring business strategy
Aselbo	Nicaragua	Hydro	900 kW	Attracting financing, Restructuring business strategy
Ancon	Panama	PV	266 systems (100W each)	Pilot Phase
Solarpan	Panama	PV	100 systems	Early stage – defining business strategy
Aboquete	Panama	Biomass		Restructuring business strategy
Pass	Panama			Redefining market strategy to expand in new markets
EPPSA	Panama	Hydro	5 different project with a total of 38.5 MW	Attracting financing, pre-feasibility phase
Ademipp	Panama	PV		Attracting Financing

From the above projects supported:

- 965 kW of new and clean energy being delivered in Honduras (Snow Mountain and La Esperanza, phase 1A)
- ~1,400 solar home systems being installed (~50W) in Nicaragua over a two year period
- 4.7 MW of new and clean energy soon to be delivered from projects under expansion in Honduras and Guatemala (La Esperanza – Phase 1B and Papeles Elaborados)
- An additional 15.6 MW (Jones Hydro project, La Esperanza Phase 2 hydro project and 630 kW Yojoa) are expected to start construction in the near future in Guatemala and Honduras
- FENERCA was able to leverage US \$ 10,000 from its partnership with BUN-CA to the provision of one of the 6 enterprises that received technical assistance support
- FENERCA completed and exceeded the anticipated deliverables under this task in terms of the provision of enterprise development services and development of business plans. The successful accomplishments of the deliverables on this task was made with the support of the activities undertaken under task CA 5 – Capacity Building for Entrepreneurs and NGO's - by the provision of specific training sessions to entrepreneurs

- 16 of the projects supported through FENERCA were submitted to financial institutions for financial consideration, as part of task CA6 – Organizing Next Stage Financing efforts

It is important to highlight that a lesson learned and a challenge that the FENERCA team experienced is that even there are many renewable energy initiatives in the region, there are not enough funds to invest in the initial phases of the projects. Most of the financial institutions are not willing to invest as seed capital in the renewable energy projects due to its high risk and longer term of cost recovery, which makes harder for them to succeed and reach financial closure.

Task CA4: Strengthening of Financial Institution Capacity

Expected Results throughout the program (Oct 2001 – April 2003)	Results Achieved at April 2003
1-2 institutions trained per country	Total of 34 financial institutions trained: El Salvador: 6 Guatemala: 4 Honduras: 3 Nicaragua: 10 Panama: 11
10 transactions presented to financial institutions (FI's)	Total 16 Renewable Energy transactions presented to FI's for financing consideration: El Salvador: 0 Guatemala: 6 Honduras: 5 Nicaragua: 4 Panama: 1
At least 1 deal financed per country	Total of 4 renewable energy projects financed in Guatemala, Honduras, and Nicaragua
At least 80 person /hours of training (10x8)	416 person/hours of training provided during the reporting period. El Salvador: 9 people* 8 hrs Guatemala: 6 people * 8 hrs Honduras: 7 people * 8 hrs Nicaragua: 13 people* 8 hrs Panama: 17 people* 8 hrs

Five training sessions on financing hydroelectric projects were prepared and conducted in the five targeted countries (El Salvador, Guatemala, Honduras, Nicaragua and Panama) as follows:

- August 6, 2002 – Guatemala City, Guatemala
- August 8, 2002 – Tegucigalpa, Honduras
- November 12, 2002 – Managua, Nicaragua
- November 14, 2002 – San Salvador, El Salvador
- December 12, 2002 - Panama City, Panama



Major Achievements:

Through the completion of this task the FENERCA team was able to accomplish the following results:

- The expected deliverable to provide training to 1-2 financial institutions in each country was not only accomplished, but exceeded. A total of 52 financiers were trained from 34 different financial institutions (6 financial institutions from El Salvador, 4 from Guatemala, 3 from Honduras, 10 from Nicaragua and 11 from Panama). *Annex*

5 includes a list of the financial institutions that participated on the training sessions.

- FENERCA's training sessions to financial institutions were focused on financing hydroelectric projects. This decision was made due to the fact among the renewable energy technologies in Central America, the more common is the development of hydroelectric projects given to the availability of the resource as well as the willingness to finance this kind of projects from local financial institutions. Through FENERCA's training sessions capacity building has been strengthened in the region but also the FENERCA team has been able to expand on contacts and relationships established among the financial institutions and 16 FENERCA projects have been presented to financial institutions, from which 4 have been financed.
- The FENERCA team developed and disseminated training materials for the training sessions, which include a comprehensive "Manual on Financing Hydroelectric Projects" used as a primary tool for the training sessions. This manual was designed specifically for the financial institution audience.

Training sessions organized by FENERCA have provided an impact in term of introducing financial institutions to analyzing risk and assessing investment opportunities in the renewable energy sector; however, further work remains to be done to attract and secure the necessary investment for the projects currently being structured. This is due mainly for the factors related to the risk and need of long-term investment that the renewable energy enterprises need and many conventional financial institutions are not ready to take yet. However, it is important to highlight that this situation is changing slowly and an example of that is the FENERCA's project, Papeles Elaborados that got 15 million dollars in financing from a Guatemalan Financial Institution: Banco Industrial. Also, 3 other FENERCA supported enterprises (La Esperanza, Yojoa and Jones) have gotten approval for US \$ 12.9 million for financing from 3 local financial institutions in Honduras and Guatemala (BGA, CABEL and Banco Agromercantil respectively).

Task CA5: Capacity Building for Entrepreneurs and NGOs

Expected Results of the program (Oct 2001 – April 2003)	Results Achieved at April 2003
2- 3 entrepreneurs trained per country	<p>Total of 13 “one-on-one” training sessions held with the participation of 25 people</p> <p>El Salvador: 2 Guatemala: 3 Nicaragua: 5 Panama: 3</p> <p>From the 13 enterprises trained, 11 business plans were completed</p>
At least 15 business plans developed and completed (3 new)	<p>Total of: 15 Business Plans Completed</p> <p>El Salvador: 2 Guatemala: 3 Honduras: 2 Nicaragua: 4 Panama: 5</p> <p>Total of 3 Business Plans improved: Honduras: 1 Nicaragua: 1 Panama: 1</p>
At least 80 person /hours of training (10x8)	314 person/hours

During FENERCA’s second implementation phase (October 2001 – April 2003), the FENERCA team provided targeted training sessions on a “one-on- one” bases, to structure concrete project proposals and go through the specific business plans with each entrepreneur. The objective of such training sessions was to broaden the entrepreneur’s abilities to develop a business plan and to assist them in the preparation of plans that are robust from a financial, technical, management and market perspective. FENERCA also contributed in helping entrepreneurs in attracting additional financing from potential investors.

In addition to the specific “one-on-one” training sessions provided to selected enterprises, the FENERCA team also assisted other enterprises with Enterprise Development Services – EDS through Task CA 3 (Provision of Enterprise Development Services and Business Plan Preparation).

Major Achievements:

As part of this task the FENERCA team was able to achieve:

- The team accomplished and exceeded the deliverable of number of training sessions to be provided to entrepreneurs. A total of 13 “one-on-one” training

sessions were held in El Salvador, Guatemala, Nicaragua and Panama. No training sessions were provided in Honduras due to the advanced stage of development of the projects supported as well as the entrepreneur's previous participation in FENERCA's training sessions on the first implementation of the program. *Annex 6* includes the list of entrepreneurs trained.

- From the 13 training sessions provided, 7 entrepreneurs completed business plans for their projects. Given that some entrepreneurs are developing more than one project at the same time, 11 business plans were concluded as a result of the “one-on-one” training sessions. One business plan was improved and one business plan is under development.



Many entrepreneurs need additional and “one-on-one” support to conclude their business plans, so training sessions complemented with Enterprise development services (Task CA3) had been key for the development and completion of bankable business plans, which will be more likely to secure financing.

Task CA6: Organizing Next-Stage Financing

Expected Results throughout the program (Oct 2001 – April 2003)	Results Achieved at April 2003
At least 10 deals under review by financial institutions	A total of 16 projects presented to financial institutions for financing in Central America
US\$ 5 million of financial resources committed for renewable energy initiatives	<ul style="list-style-type: none"> - More than 13 million of dollars in renewable energy initiatives under consideration by financial institutions - 13 million of dollars committed to renewable energy enterprises and soon to be disbursed - 15 million of dollars disbursed for the implementation/construction of renewable energy projects
At least 5MW of new renewable energy installed in the Central America region	<ul style="list-style-type: none"> - 965 kW of clean and new energy being delivered to the local grid - ~4.7 MW in projects supported by FENERCA under construction or expansion in Honduras and Guatemala - Additional 15.6 MW of FENERCA projects will start construction soon - A Nicaraguan PV company (Tecnosol) will install ~ 1,400 Solar Home Systems (SHS) in rural communities sold on a cash and credit basis over the next two years.
Feasibility Report for the “patient capital fund”	Final feasibility developed

In an effort to ensure that the projects supported by FENERCA through tasks CA3 (Enterprise development services and completion of business plans) and CA5 (Capacity building for entrepreneurs and NGOs) reach financial closure and are subsequently build, several financial institutions were approached in search of potential financing. The FENERCA team has played an important role in introducing renewable energy projects to local financial institutions in the region.

Major Accomplishments:

- A total of 16 FENERCA supported projects have been submitted financial institutions for investment consideration:

FENERCA FINAL REPORT – SECOND IMPLEMENTATION PHASE

Project	Capacity	Country	Financial Institution(s) Approached	Funds under consideration US \$	Funds Committed US \$	Funds Disbursed US \$
San Judas	30 MW	Guatemala	E+Co	250,000 (feasibility studies)		
Jones	3.5 MW	Guatemala	E+Co, Caseif, Bancos: Industrial, de Occidente and Agromercantil	0	100,000 3.5 Million	50,000
Selmeca	1 MW	Guatemala	CABEI, B, Agromercantil, Bancafe	1 Million		
La Laguna	2 MW th	Guatemala	E+Co	75,000		
Papeles Elaborados	Expansion of 4 MW	Guatemala	Banco Industrial	0		15 Millions
La Castalia	2 MW	Guatemala	Segelpan	250,000 (Feasibility Studies)		
La Esperanza	485 kW 748 kW 11.5 kW	Honduras	E+Co, CABEI*, Caseif, B. Interfin, BGA	0	2.9 Million 6 Million	250,000
Yojoa	630 kW	Honduras	E+Co, BGA	0	550,000	
La Boquita	173 kW	Honduras	E+Co	170,000		
Cececapa	2.8 MW	Honduras	CABEI	2.5 Million		
Tres Valles	17.2 MW	Honduras	CABEI	3.9 Million		
Tecnosol	SHS	Nicaragua	E+Co	0		100,000
Bronzeoak	1.4 MW	Nicaragua	E+Co, PCF	2.7 Million		
Aprodelbo	425 kW	Nicaragua	World Bank, CABEI, COSUDE**	1 Million		
Asoelbo	900 kW	Nicaragua	World Bank, CABEI, COSUDE	1.5 Million		
Ademipp	15 MW 50 Systems of 300 W each	Panama	ANAM***	500,000		
TOTALS				13,840,000	13,050,000	15,400,000

* CABEI (Central American Bank for Economic Integration)

** SDC/Cosude (Swiss Agency for Development and Cooperation/Agencia Suiza para el Desarrollo y la Cooperación)

*** ANAM (Environment National Authority of Panama)

From the 16 business opportunities submitted to Financial Institutions (Including E+Co):

- 5 projects have been able to secure US \$ 28,450,000 of financing, as follows:
 - US \$ 15,400,000 disbursed
 - US \$ 13,050,000 committed
- Over the past eighteen months, E+Co exceeded its original investment commitment of US \$ 305,000 in FENERCA for a total of US \$ 400,000 as follows:
 - La Esperanza, (Honduras) US \$ 250,000 for the construction of Phase 1A of the project, which represents 485 kW
 - Jones, (Guatemala) US \$ 50,000 to conclude its feasibility studies for the construction of a 3.5 MW hydro plant
 - Tecnosol, (Nicaragua) US \$ 100,000 to sell (on a cash and credit basis) and



install ~1,400 solar home systems (SHS) in rural communities over a two year period

Also E+Co has committed an additional US \$ 100,000 for Jones hydro project in Guatemala to initiate its construction.

- More than 13 million of dollars in renewable energy initiatives under consideration by financial institutions
- ~965 kW of FENERCA supported enterprises delivering clean and new energy to the local grid in Honduras – Snow Mountain, La Esperanza Phase 1A
- ~4.7 MW of FENERCA supported enterprises are currently under construction or expansion in Honduras and Guatemala - La Esperanza Phase 1B and Papeles Elaborados
- Additional 15.6 MW of FENERCA projects will start construction soon in Guatemala and Honduras – Jones, Hidro Yojoa and La Esperanza Phase 2.
- A Nicaraguan PV company (Tecnosol) will install ~ 1,400 Solar Home Systems (SHS) in rural communities sold on a cash and credit basis

Patient Capital Fund Initiative:

Given that traditional financial institutions are reluctant to invest on the early stage of renewable energy enterprises due to its high levels of risk and long term recovery, the FENERCA identified the need to create a “patient capital fund” for renewable energy projects. The concept of “patient capital” is defined as a source of funds that can offer such operations an accessible and realistic source of financing, serving as a bridge for commercial finance.

In order to assess the viability of the creation of an investment fund (“patient capital fund”), exclusively focused on the clean energy sector for the Central American region, the FENERCA team realized several in-country missions in Central America. The purpose of the in-country missions was to engage in initial discussions with potential investors and financial organizations (e.g. Shell Foundation and CABI – Central American Bank of Economic Integration) that could be interested in the creation of such a fund. Also as part of the field visits, direct consultation with key stakeholders such as government officials, entrepreneurs, and NGOs took place. An in depth market analysis about the electricity sector in the Central American region was elaborated (*Annex 7*).

As a result of the consultations and the market study, it was concluded that there is a real need and market for a fund. Also there are key stakeholders that have shown their interest in participating in the creation of such a fund such as CABI (Central American Bank for Economic Integration) and the Shell foundation among others. *Annex 8* includes feasibility report.

Task CA7: Developing Regulatory and Policy Options for Renewable Energy Projects

Expected Results Throughout the program (Oct 2001 – April 2003)	Results Achieved as of April 2003
Update key policies and barriers identified during FENERCA's initial implementation phase, as necessary	Update key policies and barriers identified during FENERCA's initial implementation phase concluded
Update of processes and strategy recommended for implementing change	Updated
Initiate a process of barrier removal of at least 3 specific actions	Processes initiated in the five targeted countries (El Salvador, Guatemala, Honduras, Nicaragua and Panama)

FENERCA'S efforts in the policy arena have had an important and positive impact, by opening a space for promoting renewable energy in the regulatory framework on the five targeted countries: El Salvador, Guatemala, Honduras, Nicaragua and Panama.

The FENERCA team, with the support of BUN-CA and its network of in-country representatives, through in-country missions and interviews with key stakeholder groups was able to gather meaningful information regarding the main policy barriers facing the implementation of renewable energy projects in the region. With that information, the FENERCA team updated the key policies and barriers that are challenging the implementation of renewable energy projects, as identified in FENERCA authored document "Developing Regulatory and Policy Options for Renewable Energy Projects in Central America". *Annex 9* includes the update list of key policies and barriers.

Regulatory entities from the five FENERCA countries (El Salvador, Guatemala, Honduras, Nicaragua and Panama) have launched legal and administrative processes and actions aimed towards the promotion of renewable energy projects and in some instances, actions have been initiated for the removal of the FENERCA identified barriers. A full list of actions initiated since FENERCA's second phase inception (October 2001) is included on *Annex 10*.

Major Achievements:

In efforts to initiate policy actions to promote the renewable energy projects in the region and remove policy barriers that are making difficult the implementation of renewable energy projects, the FENERCA team participated in several initiatives:

- Organization of the first National Renewable Energy Workshop for Municipalities. The purpose of the workshop was to promote regulatory and policy options as well as to strengthen the capacity at the local level to encourage the development of renewable energy projects. The workshop was held from December 3rd to the 5th of 2002 in Honduras where majors from 23 municipalities participated. The workshop

was organized by FENERCA in conjunction with the Secretary on Natural Resources and Environment - SERNA in Honduras and the Honduran Ministry of Energy (SERNA - Secretaría de Recursos Naturales). The USAID Mission of Honduras played a key role and helped the FENERCA team on the organization of the event and contacting the municipalities. Unfortunately no one from the local Mission was able to attend the workshop.

- The FENERCA team in conjunction with AHPPER (Asociación hondureña de pequeños productores de energía renovable) assisted the Energy Commission of the Honduran Congress in drafting legislation on “Incentives for Renewable Energy Projects”. The draft legislation was presented to Congress on July 2002 and is currently under study.
- Technical support provided to the Nicaraguan National Commission of Energy (Comisión Nacional de Energía – CNE) in drafting a policy document to incentive the promotion of small renewable energy projects.
- Dissemination of the FENERCA authored document “Developing Regulatory and Policy Options for Renewable Energy Projects in Central America” among environment and energy ministries in the region.
- Constant support to the Secretary on Natural Resources and Environment in Honduras (Secretaria de Recursos Naturales y Ambiente – SERNA) in its plans to structure and re-design the national electric framework
- The five targeted countries have initiated actions that will contribute with the implementation of renewable energy projects.

Task A1: Market Opening and Program Expansion in New Markets

This task has two components; one concerns productive uses applications through renewable energy sources and the other is a specific assessment of other market opportunities for expansion of FENERCA's efforts to other regions (South America and Africa).

For this task, four countries have been selected in South America and Africa. For the productive uses work Brazil, Senegal, Tanzania and Zambia have been selected. For the expansion of the FENERCA concept in to other markets Brazil and South Africa have been selected. To obtain a better impact with this task the regions were selected based on the existing UNEP/E+Co AREED (African Rural Energy Enterprise Development) and BREED (Brazil Rural Energy Enterprise Development) programs.

a) PRODUCTIVE USES

Productive use enterprises are those enterprises generating additional income from the use of a clean energy technology. The incremental investment in the technology is recovered through the increased income.

Productive Uses – *Northeast of Brazil*

Expected Results throughout the program (Oct 2001 – April 2003)	Results Achieved as of April 2003
10 –15 stakeholders identified by April 2002	Two successful market openings were held. Over 100 entrepreneurs participated.
2-3 Enterprises/ entrepreneurs receiving EDS	10 entrepreneurs receiving EDS
3-4 business plans completed and reviewed	4 Business plans with productive uses applications completed
3-4 business plans presented to financiers	4 Business Plans under analysis by financial institutions
Development of a Chapter on productive uses	Productive uses manual prepared and being edited and translated

The FENERCA team leveraged from the BREED (Brazil Rural Energy Enterprise Development) program for the implementation of this task. The enterprises selected to be supported with enterprise development services and business plan preparation were chosen from those ones that first attended BREED's market openings on May 7th and 13th 2003 on the Brazilian states of Bahia and Alagoas respectively. A group of 20 selected entrepreneurs participated in a two-day training program on business plan preparation from which 10 entrepreneurs were selected to receive enterprise development services through the FENERCA program.

From the 10 entrepreneurs that received enterprise development services, 4 were able to complete a business plan:

- Hot Sat (solar PV, Piauí- Bahia border)*
- Operarias do Mel (solar dryers, Alagoas)*

- Ceramica Bandeiras (biomass Alagoas)**
- Usinazul (PV, Bahia)**

* Business plans submitted as part of the fourth quarterly report on October 2002

** Business plans included on *Annex 11*.

Major Accomplishments:

- 10 enterprises receiving enterprise development services
- 4 Business plans with productive uses applications completed
- 4 business proposals submitted to financial institutions
- Manual on productive uses prepared and being translated into Portuguese
- US \$ 163,000 leveraged from the BREED (Brazil Rural Energy Enterprise Development) program for the implementation of this task.

Productive Uses - Zambia and Tanzania

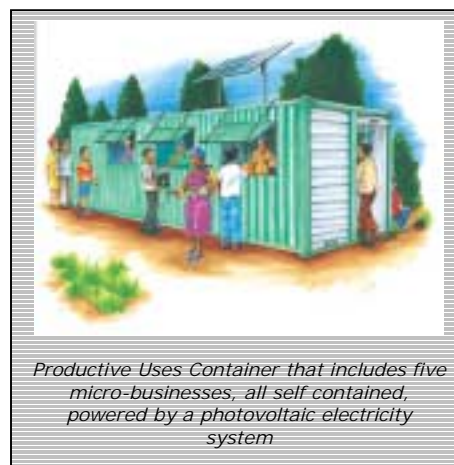
Expected Results throughout the program (Oct 2001 – April 2003)	Results Achieved as of April 2003
5 Market opportunities identified in the 14 countries (SADC) of research	15 opportunities identified
2 market opportunities identified for clean energy based on productive uses in Senegal, Zambia and Tanzania	4 market opportunities identified
Development of a productive uses kit	Technical feasibility, analysis and financial viability completed
Business Model and case study developed	3 business models (plans) including implementation plan developed

Initial research and analysis to identify and contact stakeholders with productive use applications with renewable energy technologies was made, from which 15 market opportunities were identified in the SADC region from which 5 specific opportunities were identified in Zambia, Tanzania and Senegal.

Opportunities identified:

- Solar drying for food processing
- Solar thermal bakery*
- Solar PV powered community businesses
- Productive Uses Container (PUC)*
- Integrated mini-grid*

* From the five opportunities identified, the team decided to concentrate in the development of three business models in Zambia and Tanzania.



A case study on “*Developing Modern energy productive uses options for the Zambian and Tanzanian Markets*” was developed. As part of the case study, 3 specific productive uses Business Models (business plans) were developed:

1. Productive Use Container
2. Solar Thermal Bakery
3. Integrated Mini-grid

Also, funding options for the dissemination of productive use business models were identified. *Annex 12* includes the case study, the three business models and the funding options identified.

Major Achievements:

- US \$ 20,000 of investment approved and soon to be disbursed for the implementation of a solar bakery project in Zambia
- US \$ 15,000 approved and soon to be disbursed for the implementation of enterprise that will produce juice and nutritious flour drinks in Tanzania
- 3 Business plans developed
- Case Study on “*Developing Modern Energy Productive Use Options for Zambia and Tanzanian Markets*” was developed. Technical feasibility, analysis and financial viability completed for the development of productive uses kits.
- US \$ 110,000 leveraged by E+Co from the AREED (African Rural Energy Enterprise Development) program for the implementation of this task.

b) NEW MARKETS

With the objective of expanding the FENERCA project into other markets in South America and Africa, the team evaluated and assessed different market options in the two regions, to be able to select the most appropriate ones. After extensive analyzes Brazil and South Africa have been selected as new markets to initiate the replication of the FENERCA project.

Brazil

Expected Results throughout the program (Oct 2001 – April 2003)	Results Achieved as of April 2003
At least 10 enterprises identified	Over 100 participants attended Ceara’s (Brazil) Market Opening. 10 enterprises identified
2-3 enterprises/entrepreneurs supported with EDS (Enterprise Development Services)	5 enterprises receiving EDS
1-2 Number of business plans developed	2 Business plans under development and soon to be completed
2 Number of Financial Institutions trained	30 financial institutions trained
At least 1 enterprise trained	1 enterprise trained

To launch the FENERCA program in Brazil a market opening event was held on November 21, 2002 in the state of Ceara. Over 100 participants attended the event.

There were representation of entrepreneurs, cooperatives, financial institutions and governmental officials.

Among the participants to the market-opening event, 26 were representatives of renewable energy enterprises. Following the market-opening event, 10 “one-on-one” meetings were organized with interested entrepreneurs from which 5 were selected to received enterprise development services through FENERCA.

Enterprises Receiving EDS:

Enterprise	Technology
Amorgua	Solar Drying
Ascima	PV Irrigation
Braselco	Cashew Residue
Vertical Wind*	Wind
IDEER*	Renewable Energy

* Enterprises currently developing a business plan.

A training session on “Clean Energy and Orientation Training” to financial institutions was held. The participants included representatives from pension funds, local and international banks, private equity funds and socially oriented investors.

Major Accomplishments:

- Over 100 participants attended Ceara’s market opening
- 5 enterprises receiving enterprise development services
- 2 business plans under preparation
- Program being implemented with the support of the existing UNEP/E+Co BREED (Brazil Rural Energy Enterprise Development) program
- 1 enterprise trained (IDEER)
- 30 financial institutions trained

Africa

Expected Results throughout the program (Oct 2001 – April 2003)	Results Achieved as of April 2003
10 Surveys distributed	16 surveys distributed
At least 12 stakeholders consulted	20 stakeholders consulted (in addition to the surveys distributed)
At least 10 enterprises identified	12 enterprises identified
1-2 enterprises/entrepreneurs supported with EDS	4 enterprises supported with EDS
1-2 Number of business plans developed	1 business plan under development and soon to be completed
2 Number of Financial Institutions trained	2 financial institutions trained
1 projects presented to Financial Institutions	1 project presented to a local financial institution
At least 1 entrepreneur trained	1 entrepreneur trained

For the implementation of the FENERCA program in South Africa, the surveys developed for the implementation of the program in Central America in 2000, were translated and adapted for the South African market. The purpose of the surveys was to acquire broader perspective and understanding of the policy and market barriers, training needs and project opportunities. From the surveys distributed, over 15 individuals and organizations responded. In addition to the surveys specific meetings were held with key stakeholders involved in the renewable energy sector. Over 30 stakeholders, including entrepreneurs and the local USAID mission in South Africa were consulted.

A total of 12 enterprises were identified, from which 4 enterprises were selected to receive enterprise development services from FENERCA. *Annex 13* includes the list of the enterprises identified.

Enterprises Receiving EDS:

Enterprise	Technology
Farmworks*	Biomass
New Energies	PV (Solar water heating)
Solarbeam	PV (Solar water heating)
ESG	PV (Solar water heating)

- Farmworks is currently developing its business plan and soon will be completed.

On October 29th, 2002 training session for financial institutions was held. The training session focused on risk assessment of renewable energy projects. Two financial institutions attended the training session: ABSA and IDC with the participation of 5 financiers. As a result of the training session, one project proposal was presented to ABSA in its search of financing.

Major Accomplishments:

- Over 45 stakeholders identified through surveys and specific meetings
- 4 enterprises receiving enterprise development services
- 1 business plans under preparation
- 1 project (Farmworks) seeking US \$ 45,000 presented to a financial institution (ABSA) for investment consideration
- 2 financial institutions trained

Task BDS: Business Development Support:

Expected Results throughout the program (Oct 2001 – April 2003)	Results Achieved as of April 2003
At least 2 meetings held with local USAID Missions in each country	More than two meetings held with USAID local officials in the five targeted countries (El Salvador, Guatemala, Honduras, Nicaragua and Panama) Additionally, meetings have been held in Tanzania, South Africa and Brazil
As possible, secure support from local USAID Missions	In kind support received from the USAID local missions received from local Missions as well as initiatives of mutual collaboration pursued in Honduras

One of the objectives of this task is to try to secure some kind of support from the local USAID Missions. To do that, the FENERCA team has worked hard in identifying areas of mutual collaboration to take advantage of important synergies between the FENERCA program and the local USAID Missions since both efforts have been active in promoting broad economic growth, social development and creating new job opportunities.

The local USAID Missions have been very supportive with the FENERCA team in terms of listening to our accomplishments and providing useful information for the development of the program. However, no monetary support has been achieved from them yet.

As a result of the constant communication and meetings held with the USAID local Missions seeking to coordinate efforts and in the search of identifying areas of mutual collaboration, members of the FENERCA team have participated in the following activities organized by the local USAID Missions:

- Participation in the Bi-national Workshop on Gender and Energy organized by Genes with the support of the USAID (April 29 – May 3, 2002). The workshop was held in Costa Rica and brought together 22 participants from Costa Rica and Panama.
- Participation in a conference organized by the USAID and the Authority of the Panama Canal (ACP - Autoridad del Canal de Panama) on June 2002. A presentation was given by FENERCA members on “Renewable Energy Business Opportunities”.
- Participation in a workshop organized by Genes on “Gender and Energy” through Winrock International and with the support of the USAID (July 10, 2002). The workshop was held in El Salvador and brought together 25 participants from El Salvador, Guatemala, and Mexico. The participation of FENERCA in the event was key to its success where the participants benefited from the experiences on the renewable energy field shared



Participants in the Workshop on Gender and Energy held in El Salvador

by the FENERCA team.

- Participation on the “XVII Meeting with Municipalities” organized by FUNDEMUN with the support of USAID local Mission in Honduras (July 18 and 19, 2002). Forty-four municipalities participated in this event. The local Mission in Honduras believes that it is important to strengthen the municipalities in order to improve living conditions and economic growth and FENERCA has an important role in building the capacity of the municipalities in the field of energy through renewable energy. As a result of such participation, the FENERCA team is coordinating with the USAID local Mission and SERNA (Secretary of Energy in Honduras) the organization of a workshop on renewable energy for about 10 municipalities. The selection of such municipalities will be made based on those that have poor access to energy services and can be most benefited by the development of renewable energy enterprises in their municipalities (this efforts were also mentioned on Task CA 7).
- On November 2002, a member from the FENERCA team participated in the USAID – Brazil’s Annual Meeting. This meeting included many renewable energy stakeholders in Brazil and was a good opportunity for networking and sharing experiences. In addition to that, USAID Brazil’s energy director, Alexandre Mancuso, participated in the FENERCA’s market opening in Brazil on November 21, 2002.
- Two representatives from E+Co participated on February 28, 2003 on the Rural Team Partners Meeting organized by USAID EGAT/EIT in Washington.

Also, local USAID Missions have provided the following support to FENERCA:

- The regional Mission of Central America based in Guatemala has provided important information to make additional contacts in the region.
- The USAID Missions in El Salvador and Panama have promised to establish some contacts with local NGOs working on the renewable energy field.
- Honduran Local USAID Mission have been key on the organization of an event that that was held on December 2002 with the participation of 23 municipalities in Honduras. FENERCA and the Secretary on Natural Resources and Environment - SERNA –organized the event (Task CA 7).

Task MME: Project Management, Monitoring and Evaluation:

Expected Results throughout the program (Oct 2001 – April 2003)	Results Achieved as of April 2003
Timelines of MME reports (quarterly reports)	- Six quarterly reports submitted by task managers on time - Annual and final reports submitted by BUN-CA
Budget performance and Monitoring level of expenses	Level of expenses reported on a quarterly basis.
Reporting milestones and achievements of expected results	Reported and on target according to work plan

The FENERCA management team developed a tool that provides specific information on the progress achieved under each task (CA3, CA4, CA5, CA6, CA7, BDS, A1 and MME) on a quarterly basis. Such a tool is called “Task performance quarterly report” and was developed based on the performance indicators of each task. When FENERCA’s second phase initiated on October 2001, this tool was updated and adapted and has been the base for the development of the quarterly reports presented to the USAID. The task performance quarterly report had been used in conjunction with the work plan developed by the FENERCA team on October 2001 and the periodic coordination and monitoring meetings to track all program achievements and tackle areas of improvement as needed.

Throughout the 18 months of the implementation of the FENERCA program, several coordination and working sessions were held with the participation of FENERCA members. These sessions were key for the success of the program and a timely accomplishment of all deliverables according to the FENERCA work plan as well as to set course of corrections when needed.

For the implementation of the program a sub-contract was signed with BUN-CA who worked with its network of local representatives in each of the five targeted countries. As part of the Monitoring and Evaluation mechanism BUN-CA prepared and submitted Annual and Final implementation reports, which were developed as part of the E+Co sub-grantee agreement with BUN-CA for the “Leader with Associates Cooperative Award. These report detailed all specific work undertaken by BUN-CA. Final Report of Activities is included in *Annex 14*.

Major Accomplishments:

- Monthly FENERCA’s team conference calls held
- Periodic FENERCA’s team coordination and working sessions held
- Development of a management tool: “Task performance quarterly report” to keep track of progress achieved every quarter and set course of corrections when needed
- Most deliverables committed by FENERCA to USAID accomplished
- Quarterly reports submitted on time
- Expenses managed and spend according to budget

OTHER ACHIEVEMENTS

- The following promotional materials have been developed and adapted with the objective of facilitate communications with stakeholders and increase program reach within the region:
 - The FENERCA team produced a new brochure for the second implementation phase of the program (October 2001 – April 2003). The brochure has general information about the program, its implementers and some of the results accomplished as well as specific contact information. The brochures were distributed to all interested stakeholders in the five targeted countries;
 - FENERCA's information included in both E+Co and BUN-CA's website was updated including program extension, objective, deliverables and accomplishments;
 - To facilitate access and communication to the program a FENERCA website was developed and currently can be access on line: www.fenerca.com.
- A global management system tool through E+Co's intranet was developed. This tool has facilitated communication flow among FENERCA members in terms of project pipeline (Task CA3), funders identified (Task CA 6) and project specific needs in terms of enterprise development services and funding requirements (Task CA3 and CA 6).
- FENERCA has been established as a well-known brand in the Central American Region. This has been due to its impact in supporting renewable energy enterprises, its role in influencing local financial institutions to be more open for investment of renewable energy projects and assisting on the policy arena to create an environment more open and flexible for the implementation of renewable energy projects. As a result of that FENERCA members have been invited to numerous events and working sessions in the region such as:
 - Workshop on Financing Agroindustries in Panama organized by the National Bank of Panama (BNP);
 - National Renewable Energy Workshop organized by AHPPER (Asociación hondureña de pequeños productores de energía renovable) in Honduras;
 - Gender and Energy Workshop organized by Winrock International in El Salvador.

BUDGETARY ISSUES

Annex 15 shows the financial performance report of the program.

ANNEXES:

Following is a list of the annexes included as part of this report:

- Annex 1: FENERCA's Pipeline
- Annex 2: Description of projects supported by FENERCA
- Annex 3: List of Enterprises that received Technical Assistance
- Annex 4: Renewable Energy Business Plans concluded
- Annex 5: List of the financial institutions trained
- Annex 5: List of entrepreneurs trained
- Annex 7: Central American Market Study
- Annex 8: Feasibility Report for the creation of a “Patient capital fund” in Central America
- Annex 9: List of Key renewable energy policies and barriers in Central America
- Annex 10: Actions initiated for the removal of barriers that difficult the implementation of renewable energy projects in Central America
- Annex 11: Business Plans with Productive Use applications developed in Brazil
- Annex 12: Case Study, Business Models (Plans) and Funding Options for Modern Energy Options for the Zambian and Tanzanian markets
- Annex 13: Renewable Energy enterprises identified in South Africa
- Annex 14: BUN-CA's Final Report of Activities
- Annex 15: Financial Performance Report

Annexes

Available upon request.